

TX station: 1+1 Akl5-Bidirectional

Gain solid integration : enabled

Site Name: Labelitaly

General data of Antenna System

TX station	1+1 Akl5-Bidirectional
Site Name	Labelitaly
System of coordinates	Geographic
Longitude	00°00'00.000"
Latitude	00°00'00.000"
Ground level a.s.l. (m)	100.0
Antenna system height (m)	50.0
Transmitter power(Watt)	1000.000
Carrier wave frequency (MHz)	98.000
Antenna system central frequency (MHz)	98.000
Antenna base diagrams type 1	LABEL ITALY-AKL_5 LOG 5 ELEM. FM WB
Antenna base diagrams type 2	-
Polarization (H/V/C/X)	V
Transmitting cable attenuation (dB)	0.0
Additional attenuations(dB)	0.0
Base diagrams sectors (T = All, F = Front)	T
Velocity factor of cables to Antennas (0÷1)	0.88
Coordinate System(C = cartesian, P = polar)	P
Mast side / diameter(cm):	10.0
Mast cross section (T/Q/C)	C
Structure rotation w.r.t. North (°)	0.0
Mast rotation w.r.t. North (°)	0.0

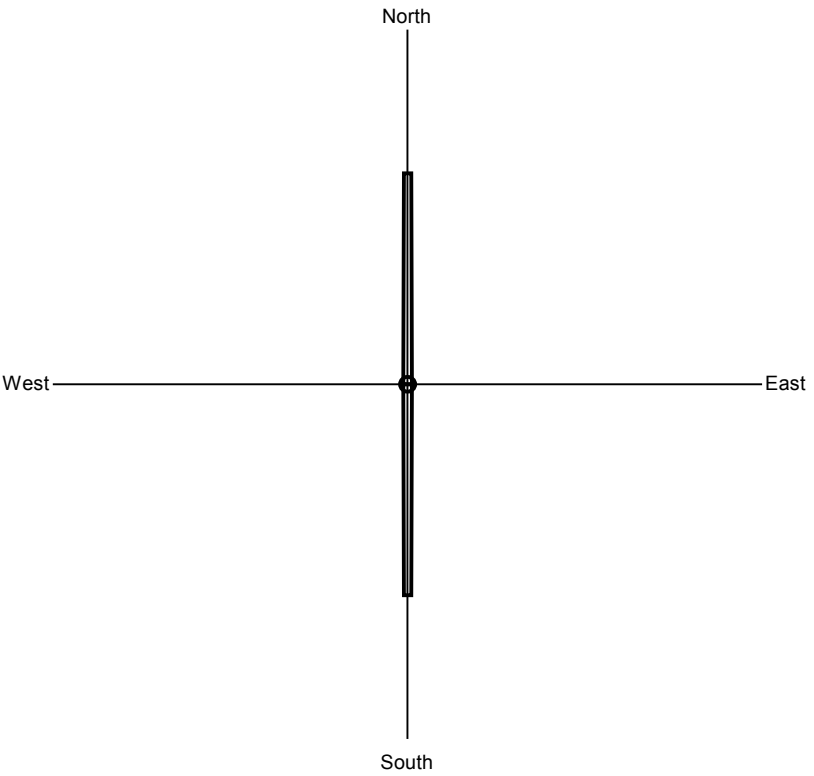
Information about antennas used in the System

	<i>Antenna type 1</i>
Manufacturer	LABEL ITALY
Antenna model	AKL_5 LOG 5 ELEM.
Band start(MHz)	88
Band stop(MHz)	108
diagrams Frequency(MHz)	98
Polariz (H,V,C,X)	V
Vertical dist (cm)	260
Height (cm)	173
Width (cm)	6
Thickness (cm)	143
Weight (Kg)	4.5
Maximum power (KW)	2
Gain (dBd)	6.2
North E.C. (cm)	0
East E.C. (cm)	0
Return loss (dB)	20
R.C.Phase (°)	0

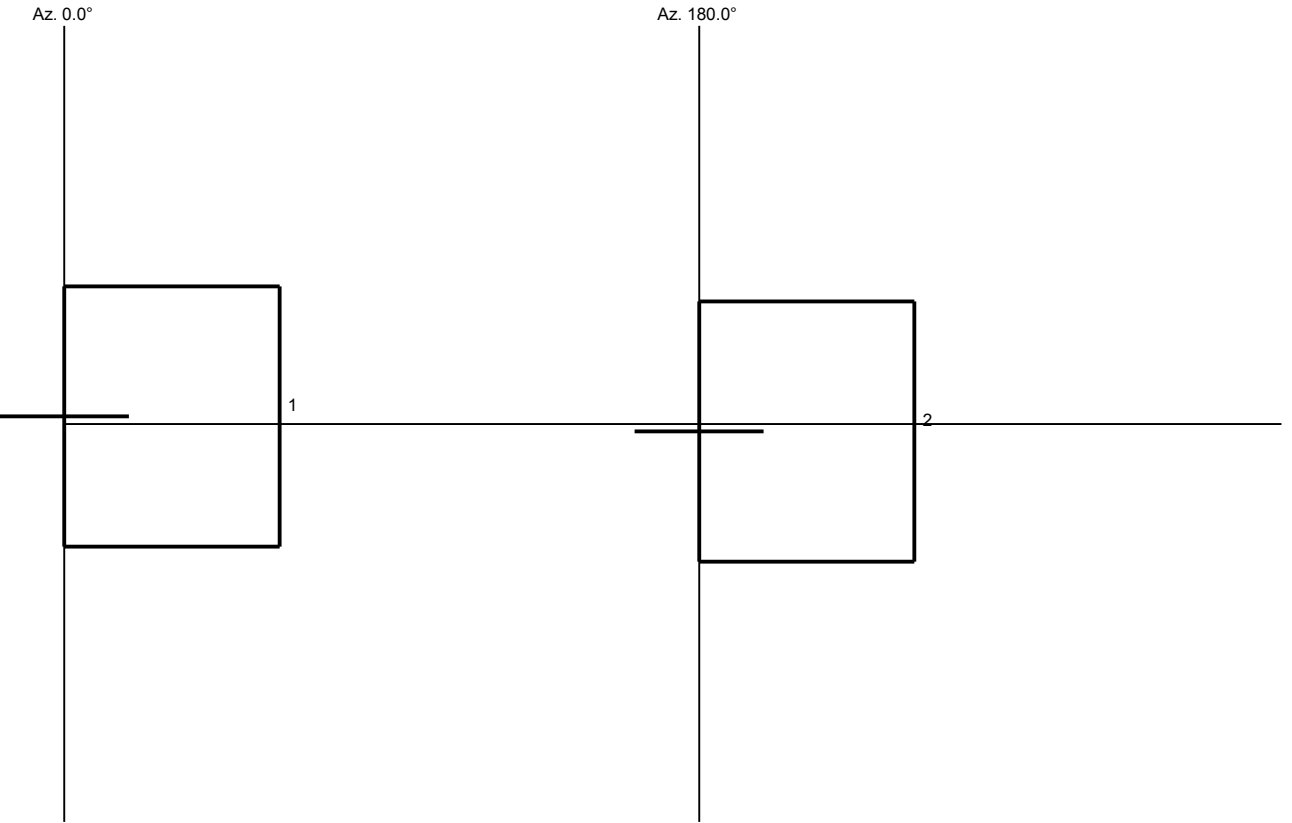
Geometr. and electrical data of Antenna System

	<i>Power</i> (%)	<i>Tilt</i> (°)	<i>Az.</i> (°/N)	<i>Phase</i> (°)		<i>V dist.</i> (m)	<i>Scr-d</i> (cm)	<i>Scr-Az</i> (°/N)	<i>Rot.</i> (1÷4)	<i>Type</i> (1÷2)	<i>L cables</i> (cm)	<i>Car. phase</i> (°)
1	50.000	0	0	0	+0.0	0.05	0.0	0.0	1	1	0.0	0.0
2	50.000	0	180	0	+0.0	-0.05	0.0	180.0	1	1	0.0	0.0

Plan of antenna system



Side of antenna system



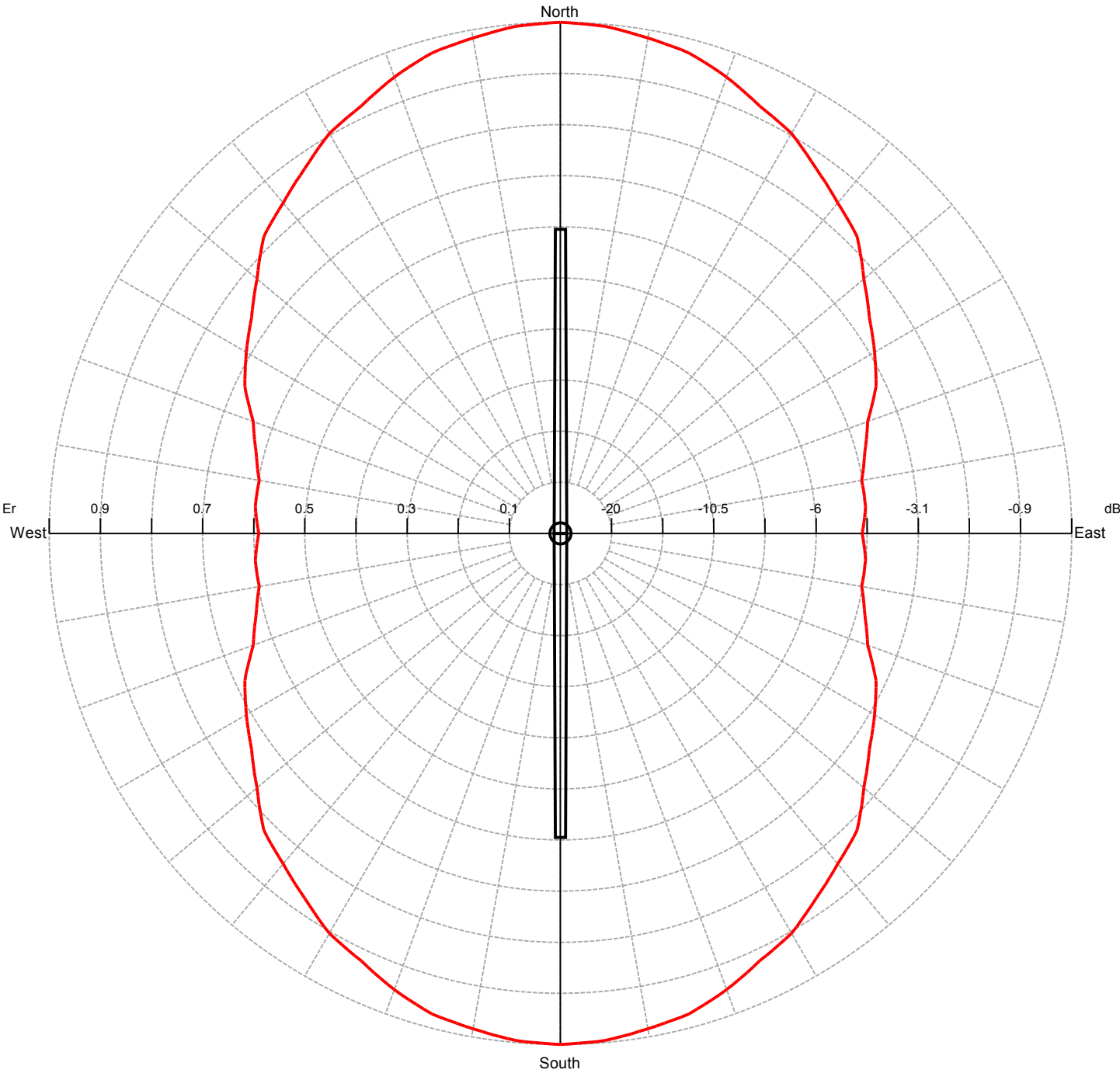
Antennas arrays data

A. Antennas array azimuth (°/N)	0	180
B. Number of antennas	1	1
C. Nominal power supply (W)	500.00	500.00
D. Losses (addit. + cables) (dB)	0.0	0.0
E. Effective power supply (W)	500.00	500.00
F. Theor. maximum gain (dBd)	4.89	4.89
G. Distribution losses (dB)	0.00	0.00
H. Nominal max gain [F - G] (dBd)	4.89	4.89
I. Compensation losses (dB)	0.00	0.00
J. Effec. max gain [H - I] (dBd)	4.89	4.89
K. Effec. max gain (times)	3.08	3.08
L. Effec. max power [E * K] (KW)	1.5400	1.5400
M. Max power depr. angle (°)	0.0	0.0
N. Max power az. angle (°)	0	180

Diagram in dBK calculated at horizon

Az. (°/N)	dBK	Az. (°/N)	dBK	Az. (°/N)	dBK	Az. (°/N)	dBK
0	2.6	90	-2.0	180	2.6	270	-2.0
10	2.4	100	-1.9	190	2.4	280	-1.9
20	2.1	110	-1.3	200	2.1	290	-1.3
30	1.7	120	-0.4	210	1.7	300	-0.4
40	1.1	130	0.4	220	1.1	310	0.4
50	0.4	140	1.1	230	0.4	320	1.1
60	-0.4	150	1.7	240	-0.4	330	1.7
70	-1.3	160	2.1	250	-1.3	340	2.1
80	-1.9	170	2.4	260	-1.9	350	2.4

Horizontal diagram at 0.0° depres. (Total Antenna)



0.0° depres. (Total Antenna),

Gain (dBd): 2.58

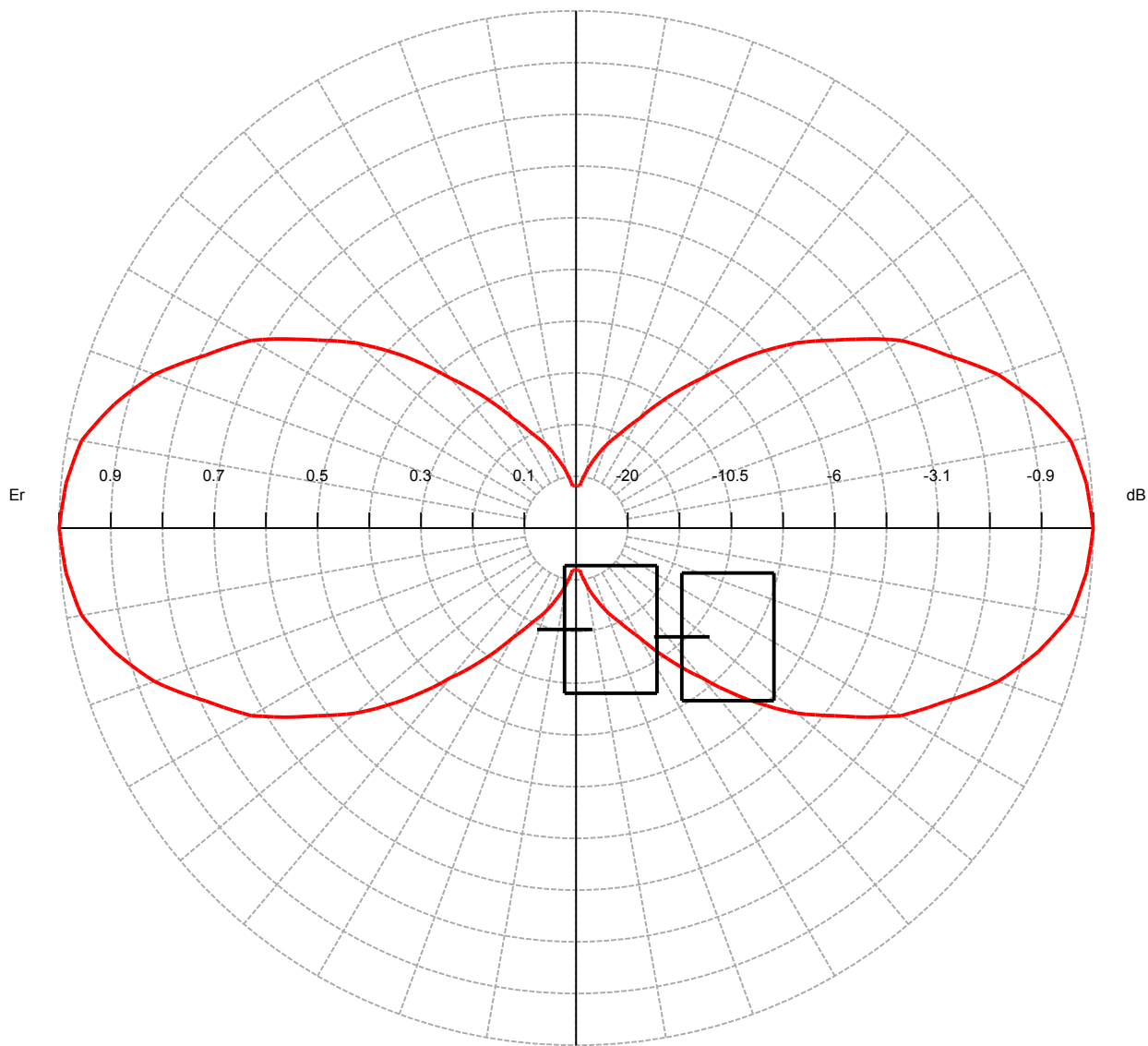
ERP T.Max(KW): 1.8096

ERP E.Max(KW): 1.8096

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Vertical diagram at an azimuth of 0.0° degrees



0.0° Az. (Total Antenna), Gain (dBd): 2.58

ERP T.Max(KW): 1.8096 ERP E.Max(KW): 1.8096